

code pattern information is read and the size of the body can be measured at the same time, so that an apparatus having a simple constitution for reading the size of a body and code pattern information can be provided.

5 As mentioned above, according to the present invention, the length of a detection object can be detected precisely.

What Is Claimed Is

10 1. An apparatus for automatically detecting a size of a detection object comprising:

 a detection object whose size is to be detected;

 a background panel which is arranged behind said detection object, said background panel having a mark as a standard and being longer than said detection object; and

15 a controller for optically scanning said detection object and said background panel from forth, and automatically detecting the size of said detection object on the basis of a signal obtained by electrically converting reflected light.

20 2. An apparatus for automatically detecting a size of a detection object comprising:

 a detection object whose size is to be detected;

 a background panel arranged behind said detection object, said background panel having a mark as a standard and a code pattern arranged along a length direction of said detection
25 object, and being longer than said detection object; and

a controller for optically scanning said detection object and said background panel from forth and automatically detecting the size of said detection object on the basis of a signal obtained by electrically converting reflected light.

5 3. An automatic analyzer comprising:

an analytical unit for analyzing components of a sample which is an analytical object using a reagent, a reagent container for storing said reagent;

10 a sampler unit for holding said sample and executing a pouring operation so as to transfer said sample of a volume necessary to analysis to said analytical unit; a controller for controlling said analytical unit and said sampler unit; and

15 a power unit for supplying power necessary for operations of said controller, said analytical unit, and said sampler to said respective units,

20 wherein an optical information reader for reading contents of a code pattern label attached to a container for storing said sample for an object of discrimination is installed, and a background panel having a mark as a standard is installed behind said container, and means for optically scanning said background panel and said code pattern by said optical information reader, measuring a height of said container with said code pattern attached on the basis of
25 a signal obtained by electrically converting reflected light,

and transmitting a result indicating said measured height of said container and discrimination information of said code pattern to said controller is provided.

4. An automatic analyzer comprising:

5 an analytical unit for analyzing components of a sample which is an analytical object using a reagent;

 a reagent container for storing said reagent, a sampler unit for holding said sample and executing a pouring operation so as to transfer said sample of a volume necessary to analysis
10 to said analytical unit, a controller composed of an electron circuit including an MPU, a memory, an I/O unit, and a sequencer for processing information and a storage unit for controlling said analytical unit and said sampler unit, and a power unit for supplying power necessary for operations of said
15 controller, said analytical unit, and said sampler to said respective units;

 wherein an optical information reader for reading contents of a code pattern label attached to a container for storing said sample for an object of discrimination is
20 installed, and a background panel having a mark as a standard is installed behind said container, and means for optically scanning said background panel and said code pattern by said optical information reader, measuring a height of said container with said code pattern attached on the basis of
25 a signal obtained by electrically converting reflected light,

and transmitting a result indicating said measured height of said container and discrimination information of said code pattern to said controller is provided.

5 5. An apparatus for automatically detecting a size of
a detection object according to Claim 2, wherein said
background panel includes an auxiliary symbol in a
neighborhood of said mark as a standard.

10 6. An automatic analyzer according to Claim 3, wherein
said background panel includes an auxiliary symbol in a
neighborhood of said mark as a standard.

15 7. An automatic analyzer according to Claim 4, wherein
said background panel includes an auxiliary symbol in a
neighborhood of said mark as a standard.